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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/698,158      | 10/31/2003  | Jeffrey D. Carnevali | NPI-019             | 9849             |

7590 09/15/2004

Charles J. Rupnick  
PO Box 46752  
Seattle, WA 98146

EXAMINER

STERLING, AMY JO

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3632

DATE MAILED: 09/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/698,158

Applicant(s)

CARNEVALI, JEFFREY D.

Examiner

Amy J. Sterling

Art Unit

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

This is the first Office Action for application number 10/698,158, Flexible Support Arm, filed on 10/31/03. Claims 1-21 are pending.

### ***Information Disclosure Statement***

The information disclosure statement submitted on 10/31/03 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8-10 and 14-19 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 6648376 to Christianson.

The patent to Christianson discloses a flexible support having a support base (14) with a tubular aperture opening in one surface, a mounting means (12) having an tubular aperture opening in one surface and a permanently bendable metal rod (16, See Col. 2, line 4 for material selection) having a first end installed in the opening of the support base (14) and fused directly by ultrasonic welding (See Col. 6, lines 55-56) or

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metal-to-metal fusible, to the support base and having a second end installed in the opening of the mounting means and fused directly by ultrasonic welding to the mounting means (12), and a flexible plastic sheath (10). Christianson teaches that the support base and mounting means openings further comprise a second larger counter-bored opening into which an end of the sheath is inserted.

Christianson also discloses the method of forming a support base (14) having a tubular aperture therein and forming a mounting bracket (12) with a tubular aperture therein and fusing the ends of a permanently bendable metal rod (16) to both of the apertures.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 13, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 6648376 to Christianson as applied to claims 1, 2, 4, 5, 9 and 16 above and further in view of United States Patent No. 5842670 to Nigoghosian.

Christianson teaches the method of installing a flexible sheath (10) around a metal rod (16).

Christianson does not teach that the rod is a solid metal rod made of aluminum, copper or coated copper and the support base and mounting bracket are made of aluminum or the method of forming a support base and mounting bracket of weldable aluminum material.

Nigoghosian discloses applicant's basic inventive concept, all the elements which are shown above and including a solid flexible rod (14) or the rest of the device which is made from a weldable material such as copper or aluminum (See Col, 3, lines 38-39 for material selection), used because the properties of such a metal makes them weldable. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made from the teachings of Nigoghosian to have made the device of any suitable material or method of forming them from any suitable material, in order to easily attach the components to each other.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 6648376 to Christianson and in view of United States Patent No. 5842670 to Nigoghosian as applied to claims 1, 2, 4, 5 and 6 above and further in view of United States Patent No. 6637642 to Lingnau.

Christianson and Nigoghosian show the basic inventive concept with the exception that they do not teach that the metal rod is made of upset metal finish or upset surface material.

Lingnau discloses solid state welding including teaching that the upset finish of the metal can and will affect the welding profile. (See Col. 8, lines 6-24). Therefore it

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would have been obvious to make the metal tubing with an upset finish on the surface, in order to further change the welding characteristics of the metal rod.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 6648376 to Christianson as applied to claim 10 above and further in view of United States Patent No. 6637642 to Lingnau

Christianson and shows the basic inventive concept with the exception that they do not teach that the metal rod is made of upset metal finish or upset surface material.

Lingnau discloses solid state welding including teaching that the upset finish of the metal can and will affect the welding profile. (See Col. 8, lines 6-24). Therefore it would have been obvious to make the metal tubing with an upset finish on the surface, in order to further change the welding characteristics of the metal rod.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 6648376 to Christianson and in view of United States Patent No. 6637642 to Lingnau as applied to claims 10 and 11 above and in further view of United States Patent No. 5842670 to Nigoghosian.

Christianson and Lingnau do not teach that the rod is a solid metal rod made of aluminum, copper or coated copper.

Nigoghosian discloses applicant's basic inventive concept, all the elements which are shown above and including a solid flexible rod (14) which is made from a weldable material such as copper or aluminum (See Col. 3, lines 38-39 for material selection), used because the properties of such a metal makes them weldable.

Therefore, it would have been obvious to one having ordinary skill in the art at the time

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the invention was made from the teachings of Nigoghosian to have made the rod of any suitable weldable material, in order to easily attach the components to each other.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following documents show various flexible supports

2004/0155164 to Richter

6315252 to Schultz

5956861 to Barnes

5810306 to Hun et al.

5690307 to Joyce

5489075 to Ible

5135189 to Ghazizadeh


2681782 to Morishita

Any inquiry concerning this communication should be directed to Amy J. Sterling at telephone number 703-308-3271. The examiner can normally be reached (M-F 8 a.m.-5:00 p.m.). If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Leslie Braun can be reached at 703-308-2156. The fax machine number for the Technology center is 703-872-9306 (formal amendments) or 703-308-3519 (informal amendments/communications).

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Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist at 703-308-2168.



AJS  
Amy J. Sterling  
9/8/04



ANITA KING  
PRIMARY EXAMINER